

L 29971-65 EWT(d)/FSF(h)/FSS-2/EWT(1)/EEC(m)/FS(v)-3/EEC(k)-2/EWG(s)-2/EWG(v)/
FCC/EWA(d)/EEC-4/EEC(t)/EEC(c)-2/EWA(h) Pn-4/Po-4/Pe-5/Pq-4/Pac-4/Pg-4/Pi-4/
Pk-4/Pl-4/Pae-2/Peb AST/TT/GW-2/WS

ACCESSION NR: AP5005447

S/0293/65/003/001/0172/0174

AUTHOR: Goryunov, N. N.; Savin, B. I.; Sosnovets, E. N.

TITLE: Transistorized electrometric amplifier for measuring weak currents from charged-particle detectors

SOURCE: Kosmicheskiye issledovaniya, v. 3, no. 1, 1965, 172-174

TOPIC TAGS: transistorized amplifier, electrometric amplifier, charged particle detector, weak current measurement, atmospheric radiation detection/Cosmos 12, Cosmos 15

ABSTRACT: A transistorized amplifier for measuring weak currents ($< 10^{-7}$ amp) is described, in which the conversion of dc into voltage pulses proportional in amplitude to the current is realized by means of a capacitor and a relay. The device permits digital registration of the measured current and by virtue of its compact size is a useful component in space probes. Since it is virtually insensitive to the polarity of the measured current, it can be used with either electron or positive-ion detectors. The circuit contains four amplification stages and a nonlinear negative feedback circuit which increases the gain by a factor of 10. For registering widely varying current, several individual amplifiers can be used. Three of

Card 1/2

L 29971-65

ACCESSION NR: AP5005447

the amplifiers were used to measure weak current in the charged-particle collectors of the electrostatic analyzers aboard Cosmos-12 and Cosmos-15. The total dynamic range of the circuit was 1000; the maximum number of pulses in a sequence was 40. Threshold sensitivity of the first amplifier was 10 mv. Threshold current was roughly 8×10^{-15} amp; intensity was 6×10^6 $1/E_0$ part/cm²/sec/kev (where E_0 is the particle energy in kev to which the analyzer is adjusted). Orig. art. has: 2 figures. [DW]

ASSOCIATION: none

SUBMITTED: 18Apr64

ENCL: 00

SUB CODE: EC, NP

NO REF SOV: 000

OTHER: 000

ATD PRESS: 3196

Card 2/2

L 17777-66 EWT(1)/FSS-2/FCC/EWA(d)/EWA(h) TT/GW

ACC NR: AP6006652

SOURCE CODE: UR/0203/66/006/001/0003/0010

AUTHOR: Vernov, S. N.; Driatskiy, V. M.; Kuznetsov, S. N.; Logachev, Yu. I.;
Sosnovets, E. N.; Stolpovskiy, V. G. 45

ORG: Moscow State University. Institute of Nuclear Physics (Moskovskiy gosudar-
stvennyy universitet. Institut yadernoy fiziki) B

TITLE: Behavior of the radiation belts¹² and anomalous absorption of cosmic radio
noise in the aurora borealis region during the magnetic storms of 12-14 February
and 20-21 February 1964

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 1, 1966, 3-10

TOPIC TAGS: cosmic noise measurement, radio wave absorption, aurora, magnetic
storm, radiation belt, magnetosphere

ABSTRACT: The authors make a direct comparison of electron fluxes with differing
energies in the outer radiation belt during various stages of geomagnetic disturb-
ances. The data used in this study were those transmitted by the Electron-1¹² and
Electron-2¹² satellites during the magnetic storms of 12-14 and 20-21 February 1964.

Card 1/4

UDC: 550.385.41:621.391.81 2

L 17777-66

ACC NR: AP6006652

These were relatively weak storms with an abrupt onset. The outer radiation belt behaved differently in each of these cases in spite of the fact that the storms were approximately identical with respect to the amplitude of the main phase. Pc oscillations with a period of approximately 40 seconds were observed on the day of the first storm, indicating a quiet magnetosphere. During the first hour of the storm, an electron flux of $\sim 1.5 \times 10^8$ cm²/sec/kev was observed at a distance of approximately 10 Earth radii. This region lies far outside the radiation belts of the Earth, and the flux was apparently due to the storm. The magnetic field increased in this region during the first phase of the storm. Electron intensity decreased somewhat after the initial phase. Electron-1 data gave the boundary of the outer radiation belt on the night side as $L = 6.5-7$ before the abrupt onset of the storm, while the data of Electron-2 gave a value of $L = 7.4$. Data from these satellites gave $L = 5.5-5.8$ and $L = 5.9$, respectively, after the initial phase of the storm. This may be explained by compression of the magnetosphere. The period of Pc oscillations after the initial phase was approximately 20 sec. The period of the Pc oscillations was reduced to 16 sec when the boundary of the radiation belt shifted to $L = 5$. There was a faster increase in the flux of electrons with energies greater than 40 kev during the main phase of the storm than there was in the intensity of electrons with energies greater than 150 kev. The basic data for the

Card 2/4

L 17777-66

ACC NR: AP6006652

storm of 20-21 February were those transmitted by the Electron-1 satellite. These data show that the boundary of the outer radiation belt was at $L = 6-6.5$ before the storm. The period of Pc oscillations was approximately 50 sec. During the first phase of the storm, the boundary of the radiation belt was registered as $L=5$ and the period of Pc oscillations was 1.4 sec. An increase in the intensity of the magnetic field was observed at a distance of approximately 10 Earth radii. These data indicate compression of the magnetosphere. Low-energy electrons appeared at great distances from the Earth during the first phase of the storm. Data from 10 stations were used for studying the absorption of cosmic radio noise in the region of the aurora borealis. The first burst of auroral zone absorption was observed on the day side of the Earth during the first phase of the storm. This may be due to the fact that the boundary of the magnetosphere was approaching the Earth. The amplitude of anomalous absorption increased from ~ 1 db to ~ 3.5 db when the boundary of the radiation belt moved from $L = 5.6$ to $L = 9.6$. Beyond this point, there was a reduction in auroral zone absorption. After the initial phase, no more such strong "bursts" of anomalous absorption were observed until the development of the main phase. Anomalous absorption was again observed during the main phase but this time with no clear relationship to L . An analysis of the data shows that electrons pour out of the radiation belts on the day side of the earth during the first phase

Card 3/4

L 17777-66

ACC NR: AP6006652

of a magnetic storm. This is indicated by the reduction in electron intensity in the maximum of a belt and at higher values of L . Evaluations show that during the first phase of a storm the mirror points of electrons in the outer radiation belt may move several hundred kilometers closer to the Earth. Anomalous absorption in the auroral zone may be observed between the first and main phases of a magnetic storm. However, in this case they are accompanied by various effects in the radiation belt region. A comparison of data on auroral zone absorption and the behavior of radiation belts shows that anomalous absorption is sometimes accompanied by a reduction in intensity in the belt and sometimes by no changes at all or even an increase in the number of particles in the belt. More data are needed on auroral zone absorption around the entire Earth and at $L < 4$. Orig. art. has: 9 figures. [14]

SUB CODE: 08/ SUBM DATE: 03Aug65/ ORIG REF: 005/ OTH REF: 004
ATD PRESS: 4209

Card 4/4 TS

ACC NR: AP7000529

SOURCE CODE: UR/0048/66/030/011/1820/1823

AUTHOR: Sosnovets, E. N.

ORG: none

TITLE: Recording low-energy protons on satellites of the Elektron series /Paper presented at the All-Union Conference on Physics of Cosmic Rays held in Moscow from 15 to 20 November 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 11, 1966, 1820-1823

TOPIC TAGS: radiation measurement, proton, proton counter, instrumentation satellite, scintillation counter

ABSTRACT: The launching of satellites of the Elektron series has made it possible to study low-energy protons over wide regions of space during the period approaching that of minimum solar activity. Each of the four satellites carried identical sets of instruments; results obtained in various parts of space at various times could therefore be compared. The results presented here deal with protons with $1 < E_p < 9$ Mev recorded by external scintillation and semiconductor counters. GI(Tl) crystals ~ 0.15 and ~ 3 mm thick were used in the scintillation counters. The counter with a thin crystal recorded protons with $(1.5 \pm 0.2) < E_p < (10 \pm 2)$ Mev; the counter with the thicker crystal

Card 1/3

ACC NR: AP7000529

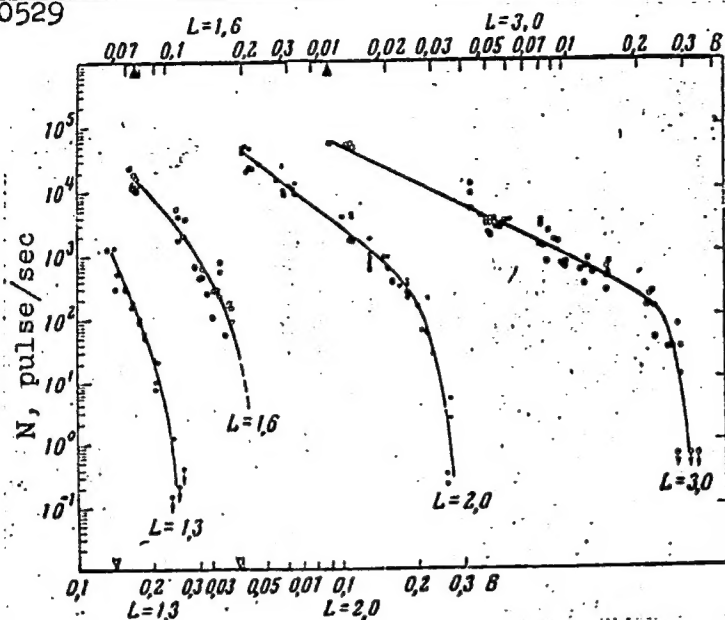


Fig. 1. Altitude distribution of protons with energy $1.5 < E_p < 15$ Mev at $L = 1.3, 1.6, 2.0$, and 3.0 . Each L has its own scale B . Triangles indicate position of the geomagnetic equator for each L .

Card 2/3

ACC NR: AP7000529

recorded protons $(5 \pm 0.5) < E_p < (80 \pm 20)$ Mev and $(9 \pm 1) < E_p < (30 \pm 5)$ Mev. In both counters the crystal was shielded with an $\sim 2 \text{ mg} \cdot \text{cm}^{-2}$ Al foil within an angle of $\sim 40^\circ$. In all other directions the crystals were shielded with an $\sim 1.5\text{--}2$ cm Pb foil. Protons with $(1.0 \pm 0.2) < E_p < (5 \pm 1)$ Mev were recorded by semiconductor counters with an $\sim 2 \text{ mg} \cdot \text{cm}^{-2}$ Al shielding. Preliminary measurements were used to construct proton distribution in geomagnetic coordinates. Parameter L and magnetic field strength B were employed as such coordinates. Proton intensity vs. latitude for several fixed L's, and experimental points related to proton detectors carried by different satellites are shown in Fig. 1. Points at L = 1.3, 1.6, and 2 were obtained by Elektron-3, and points at L = 3 were obtained by Elektron-1 and Elektron-2. Orig. art. has: 3 figures. [WA-75]
[JR]

SUB CODE: 22,20,18/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 003

Card 3/3

L 1551-66 ENT(1)/FCC/ENA(h) GW/OS

ACCESSION NR: AT5023613

UR/0000/65/000/000/0420/0425

AUTHOR: Kuznetsov, S. N.⁴⁴⁵⁵; Sosnovets, E. N.⁴⁴⁵⁵; Stolpovskiy, V. G.⁴⁴⁵⁵

TITLE: Time variations of the earth's outer radiation belt

SOURCE: Vsesoyuznaya konferentsiya po fizike kosmicheskogo prostranstva, Moscow, 1965. Issledovaniya kosmicheskogo prostranstva (Space research); trudy konferentsii. Moscow, Izd-vo Nauka, 1965, 420-425

TOPIC TAGS: cosmic ray, cosmic radiation, earth radiation belt, Elektron 1, Elektron 2^{12,44,55}

12,55

ABSTRACT: Data from Elektron-1 and -2 for the period 30 January to 23 February 1964 were used in a study of variations of the outer radiation belt on the night side of the earth. Particular attention was given to the intensity of counts in the maximum of the belt and to variations of the position and boundaries of the maximum. McIlwain coordinates, calculated in the dipole approximation, were used. Graphs of the variations in time of the Kp and K indexes (for the College and Murmansk stations respectively), showed, in general, a decrease in the frequency of the Geiger counter during periods of increased magnetic activity, although occasionally the frequency increased with intense magnetic activity (e.g., on 6 February at

Card 1/3

L 1551-66

ACCESSION NR: AT5023613

12:00 UT). The sudden onset of a magnetic storm can be accompanied by a drop in the count frequency, sometimes by as much as one order of magnitude. The non-monotonic drop in count frequency during the storm of 12-13 February 1964 was explained by the decrease in magnetic disturbance after a sudden beginning and the main phase. After the initial drop, however, a twofold increase in the count frequency was generally observed during a 24-hr period (confirmed also during the storm of 31 January and 20 February 1964). The position of the radiation maximum changed little during magnetic disturbances. However, on 12-13 and 20 February, its L parameter decreased by ≈ 3.8 to 4. The boundaries of the belt were affected by the magnetic field changes to a greater degree, and shifts to lesser L at higher as well as lower altitudes were in general agreement with Forbush, Pizzella, and Venkatesan (Geophys. Res., 67, N10, 1962, 3651). Contradictory observations were explained by irregular electron fluxes outside the belt's boundary. The shift of the boundary toward smaller L was attributed to an "outpouring" of electrons near the boundary not only during magnetic storms, as observed by Machlum and O'Brien (J. Geophys. Res., 68, N4, 1963, 997), but also under stationary conditions. The intake and output of electrons by the belt can occur within a period of 3 hours. The general conclusion is that the outer radiation belt is highly sensitive to magnetic conditions. The gap between the inner and outer belts appears to be the

Card 2/3

L 1551-66

ACCESSION NR: AT5023613

area in the magnetosphere in which the trapped particles behave in various fashions.
Data are presented to support this assumption. Orig. art. has: 4 figures. [FP]

ASSOCIATION: none

SUBMITTED: 02Sep65

ENCL: 00

SUB CODE: .AA, SV

NO REF SOV: 002

OTHER: 010

ATD PRESS: 4094

Card 3/3

L 3281-66 FSS-2/ET(1)/FS(v)-3/FCC/EWA(d)/EWA(h) T^L/GS/GW
 UR/0000/65/000/000/0425/0433
 ACCESSION NR: AT5023614

AUTHOR: Vernov, S. N.; Chudakov, A. Ye.; Vakulov, P. V.; Kuznetsov, S. N.;
 Logachev, Yu. I.; Sosnovets, E. N.; Stolpovskiy, V. G.

TITLE: Irregular flows of high energy electrons close to the boundary of the
 earth's radiation belts

SOURCE: Vsesoyuznaya konferentsiya po fizike kosmicheskogo prostranstva. Moscow,
 1965. Issledovaniya kosmicheskogo prostranstva (Space research); Trudy konferentsii.
 Moscow, Izd-vo Nauka, 1965, 425-433

TOPIC TAGS: geomagnetic field, satellite data analysis, radiation belt¹²

ABSTRACT: The authors analyze data obtained from "Elektron-1" and "Elektron-2" dur-
 ing their first month of operation. The equipment used on the satellites is briefly
 described. Analysis of data pertaining to the midnight meridian indicates that the
 intensity of the electrons at the boundary of the outer belt decreases by two or
 three orders of magnitude within a narrow range of radial distances. It is estab-
 lished that the radiation belt on the night side of the earth terminates on quiet
 days at $L = 6.5-7.5$. On the day side, the boundary of the belt extends on the

Card 1/2

L 3281-66

ACCESSION NR: AT5023614

average to $L = 9-10$. (Here L is the nominal McIlwain parameter calculated in the dipole approximation and expressed in earth radii.) It is found that irregular flows of electrons outside the boundary of the earth's radiation belts appear with an increase in perturbation of the geomagnetic field both at the surface of the earth and at distances of $\sim 30,000$ km from the earth. A theoretical explanation is given for this phenomenon. The experimental data support the hypothesis of a closed system of lines of force in the earth's magnetic field up to latitudes of 75° .
Orig. art. has: 9 figures and 1 table. [14]

ASSOCIATION: none

SUBMITTED: 02Sep65

ENCL: 00

SUB CODE: ES,SV

NO REF SOV: 002

OTHER: 010

ATD PRESS: 4105

Card 2/2

SOSNOVIK, G.I.

Symptomatology of thrombosis of the internal carotid artery.
Sov.med. 22 no.9:100-102 S '58 (MIRA 11:11)

1. Iz kliniki nervnykh bolezney (zav. - prof. R.A. Shakhnovich)
Vitebskogo meditsinskogo instituta.

(THROMBOSIS,

internal carotid artery, sympt. (Rus))

(ARTERIES, CAROTID, dis.

internal artery thrombosis, sympt. (Rus))

(CEREBRAL EMBOLISM AND THROMBOSIS, case reports,
sympt. in anterior & middle cerebral artery
thrombosis (Rus))

SOSNOVIK, G.I.

Peculiar form of amnesic aphasia. Sov. med. 25 no.7:150-151 J1 '61.
(MIRA 15:1)

1. Iz kliniki nervnykh bolezney Vitebskogo meditsinskogo instituta
(zav. - prof. R.A.Shakhnovich).
! (APHASIA)

SOSNOVIK, G.I.

Changes in some electrophysiological indices in hypotonic states.
Dokl. AN BSSR 8 no.8:550-552 Ag '64.

(MIRA 17:11)

1. Bol'nitsa mediko-sanitarnoy chasti stroitel'nogo tresta No.9,
Vitebsk. Predstavleno akademikom AN BSSR D.A. Markovym.

SOSNOVIK, I.I., kand.med.nauk (Leningrad, ul. Vosstaniya, d.19, kv.4)

Possible limits of liver resection; experimental study. Vest.khir. 83
no.10:54-62 O '59. (MIRA 13:2)

1. Iz kafedry operativnoy khirurgii (nachal'nik - prof. A.N. Maksimenkov) Voenno-meditsinskoy ordena Lenina akademii im. S.M. Kirova.
(LIVER surgery)

SOSNOVIK, I.I.

Primary cancer of the appendix. Vest.khim. 84 no.3:114-116
Mr '60. (MIRA 13:12)

(APPENDIX (ANATOMY)—CANCER)

SOSNOVIK, I.I.

Differences in the structure of the intraphepatic bile ducts and
their significance for surgery. Vest. khir. 85 no. 8:71-79 Ag '60.
(MIRA 14:1)

(BILE DUCTS)

VIK, I.L.

Embryonic development of the internal geniculate body, Trudy Gos.
Inst. go izuch. mozga '6:119-124 '49. (42A 10:7)
(BRAIN)

USSR/Morphology of Man and Animals - (Normal and Pathologic).
The Nervous System.

S-3

Abs Jour : Ref Zhur - Biol., No 3, 1958, 12383

of the cerebral cortex by means of gauze pads, these
changes appeared earlier and were more severe.

Card 2/2

Sosnovik, I.L.

SOSNOVIK, I.L.

Trophic ulcers and methods for their treatment. Zhur.nevr. i psikh.
Supplement:48-49 '57. (MIRA 11:1)

1. Kafedra nervnykh bolezney (prof. A.A.Kevork'yan [deceased])
Vitebskogo meditsinskogo instituta.
(ULCERS)

EXCERPTA MEDICA Sec 8 Vol 12/11 Neurology Nov 59

5721. CLINICO-ANATOMICAL CORRELATIONS IN POLIOMYELITIS (Russian text)
- Sosnovik I.L. - ZDRAVOOKHR.BELOR. 1958, 4/11 (35-38) Illus. 7

Poliomyelitis affects the nerve cells of both the anterior and the posterior horns of the spinal cord. Degeneration of the former is more marked; anterior horns also show more pronounced small-cell infiltration, formation of glial nodules and perivascular infiltration. In severe cases there is early onset of almost complete degeneration of the nerve cells in the cervical and lumbar parts of the cord, as well as destruction of the axis cylinders of the anterior roots and partial involvement of the fibres in the pyramidal tracts. Nervous tissue is affected not only in the segments corresponding to the affected limbs. Destructive changes also develop at other levels of the cord, but these are not so marked. Serious destructive changes in the nerve cells and their death may occur within the first few days after onset of illness. Clinical signs do not always correspond to the severity of the histopathological changes. This is explained by the mosaic-like character of the pathohistological changes and the polysegmental innervation of various muscle groups. (L,8,5)

SOSNOVIK, I.L., dotsent

Clinical aspects of intracranial aneurysms. Zdrav.Belor. 5 no.9:
42-43 S '59. (MIRA 12:12)

1. Iz kliniki nervnykh bolezney Vitebskogo meditsinskogo instituta
(zaveduyushchiy - prof. R.A. Shakhnovich).
(INTRACRANIAL ANEURYSMS)

SOSNOVIK, I.L., dotsent (Vitebsk)

Clinical picture and treatment of the immediate sequelae of poliomyelitis. Klin.med. 37 no.9:54-56 S '59. (MIRA 12:12)

1. Iz kliniki nervnykh bolezney (zav. - prof. R.A. Shakhnovich)
Vitebskogo meditsinskogo instituta (dir. - I.I. Bogdanovich).
(POLIOMYELITIS, complications)
(AUTONOMIC NERVOUS SYSTEM, diseases)

SOSNOVIK, I.L., doktor meditsinskikh nauk

Clinical aspects of hypotension. Zdrav. Belor. 6 no.8:33-36 Ag '60.
(MIRA 13:9)

1. Kafedra nervnykh bolezney Vitebskogo meditsinskogo instituta
(zaveduyushchiy kafedroy - professor R.A. Shakhnovich).
(HYPOTENSION)

SOSNOVIK, I.L., doktor med.nauk

Clinical aspects and course of thrombosis of the internal
carotid artery. Sov. med. 25 no.4:102-107 Ap '62. (MIRA 15:6)

1. Iz kafedry nervnykh bolezney (zav. - prof. R.A. Shakhnovich)
Vitebskogo gosudarstvennogo meditsinskogo instituta.
(THROMBOSIS)
(CAROTID ARTERY--DISEASES)

SOSNOVIK, I.L.

Clinical aspects and pathogenesis of serum sickness of the nervous system. Zdrav.Bel. 8 no.7:29-31 J1 '62. (MIRA 15:11)

1. Iz kafedry nervnykh bolezney Vitebskogo meditsinskogo instituta
(zav. - doktor med.nauk I.L.Sosnovik).
(SERUM SICKNESS) (ANTHRAX—PREVENTIVE INOCULATION)
(NERVOUS SYSTEM—DISEASES)

SOSNOVIK, I.L., doktor med.nauk; KRAVISOVA, N.M. (Vitebsk)

Clinical aspects and course of atypical forms of multiple sclerosis. Klin.med. no.9:31-35 '62. (MIRA 15:12)

1. Iz kafedry nervnykh bolezney (sav. doktor med.nauk I.L. Sosnovik) Vitebskogo meditsinskogo instituta.
(MULTIPLE SCLEROSIS)

SOSNOVIK, I.L.

Symptomatic myoplegia. Zdrav. Bel. 9 no.8:81-82 Ag'63
(MIRA 17:3)

1. Iz kafedry nervnykh bolezney Vitebskogo meditsinskogo instituta (zav. - doktor med. nauk I.L. Sosnovik).

SOSNOVIK, Z. I.,

Feb 1948

USSR/Medicine - Sysentery
Medicine - Case Records

"Certain Features of the Clinical Progress of Acute Dysentery," V. V. Stavskaya, Z. I. Sosnovik, B. N. Popov, Deputy, Dysentery Sec, Preliminary Therapeutic Clinic, First Leningrad Med Inst imeni Academician Pavlov, 8 pp

"Klin Medits" Vol XXVI, No 2

Discuss type of dysentery observed during the blockade of Leningrad. State that there was slight indication of intoxication, negligible temperature reaction, absence of typical stools, and spasm. Also sharp drop in natural immunity of population of Leningrad. Based on data collected during period, 1943 - 1945
Director of Preliminary Therapeutic Clinic: Prof M. D. Tushinskiy, Active
Member, Academy of Medical Sciences, USSR.

PA47T61

PA 65/49T72

SOSNOVIK, Z. I.

USSR/Medicine - Blood Pressure
Antigens

Mar 49

"The Toxic Action of Hypophyseal and Suprarenal Secretions on Arterial Pressure," Z. I. Sosnovik, Propedeutic Therapeutics Clinic, First Leningrad Med Inst (ment Acad I. P. Pavlov, Lab of Path Physiol, Pediatric Med Inst, 1 1/2 pp

"Clin Med" No 3

Immunized dogs with antigens obtained from cats, and vice versa. Serums obtained from the anterior part of the hypophysis lowered arterial pressure faster by about 20%. Suprarenal serums had an

65/49T72

USSR/Medicine - Blood Pressure (Contd) Mar 49

even greater effect. Further study of the physiological action of cytotoxic serums is necessary. Dir, Propedeutic Therapeutics Clinic; Prof M. D. Tushnetsky, Active Mem, Acad Med Sci USSR. Dir, Lab of Path Physiol; Prof L. R. Perel'man.

65/49T72

SOSNOVIKOVA, Ty.Ye.

Condition of defensive inhibition in unrestrained types.
Vop.psikhol. 5 no.5:87-96 S-O '59. (MIRA 13:3)

1. Kafedra psikhologii Moskovskogo gosudarstvennogo
pedagogicheskogo instituta im.V.I.Lenina.
(Inhibition) (Typology(Psychology))

SOSNOVIKOVA, Yu.Ye. (Moskva)

Psychological and pedagogical problems of labor productivity
at a scientific conference of Polish psychologists. Vop.
psikhol. 8 no.3:184-186 My-Je '62. (MIRA 15:6)
(Psychology, Industrial)

SOSNOVKIN, L.N.

Inst. Chem. Physics, Acad. Sci., Leningrad State Univl (1946)

"Kinetics of Crystallization in Diffusional Regions at Low Relative Supersaturations III."

Zhur. Fiz Khim., No.1, 1946.

W. E. SOSNOVNIKIN, L.N.

*Main and Subsidiary
techniques*

549-514.51 412
The Effect of Spurious Resonances and Parallel Losses
on the Equivalent Parameters of Quartz Crystals.—II. A
Mamyrin & L. N. Sosnovkin. (Zh. tekh. Fiz., July 1948,
Vol. 18, No. 7, pp. 955-958. In Russian.) A report of
an experimental investigation of quartz crystals manu-
factured in Russia, Germany and the U.S.A. Results
are tabulated.

1949

IVANOV, Aleksandr Borisovich; SOSNOVKIN, Lev Nikolayevich; GROZNOVA, V.I.,
redaktor; KORUZEV, N.N., tekhnicheskij redaktor

[Ultrahigh frequency pulse generators] Impul'snye peredatchiki SVCh.
Moskva, Izd-vo "Sovetskoe radio," 1956. 614 p. (MLRA 9:10)
(Oscillators, Electric)

L 14438-65 EWT(m)/EPF(c)/EPF(n)-2/EPR Pr-4/Ps-4/Pu-4

ACCESSION NR: AP4045663

P/0046/64/009/07-/0523/0537

AUTHOR: Buras, B.; Leciejewicz, J. (Letseyevich, Ya.); Sosnowksa, I. (Sosnovska, I.); Sosnowski, J. (Sosnovski, Ye.); Nitc, W. (Nitts, V.); Shapiro, r.

TITLE: The time-of-flight method for investigations of neutron crystal structure and its possibilities in connection with very high flux reactors

SOURCE: Nukleonika, v. 9, no. 7-8, 1964, 523-537

TOPIC TAGS: powdered crystal, neutron structure, time of flight method, powdered crystal structure, diffraction peak

ABSTRACT: A new method for investigating the neutron structure of powdered crystals using the time-of-flight technique is described. A pulsed neutron beam is scattered on a powdered crystal, and the intensity of the scattered neutrons is measured at a fixed angle 2θ by means of neutron counters connected to a multichannel time analyser. As a result the dependence of intensity on neutron wave lengths is

Card 1/3

L 14438-65

ACCESSION NR: AP4045663

obtained. The peaks are indexed in the usual manner, while the structure factors are determined using a formula for integrated intensity specially derived for this type of experiment. According to this formula the integrated intensity is proportional to the fourth power of the wavelength, thus distinguishing peaks of longer waves so that peaks corresponding to 4—5 Å are also clearly visible. This is very suitable for studying crystals with large unit cells and for studies requiring a very high resolution. Additional advantages of this method are: no higher-order contaminations and an appreciable shortening of the exposure time as compared with the conventional method. The feasibility of this method was proved experimentally at the EWA reactor in Swierk (Poland) (using a chopper) and at the pulsed reactor IBR in the Joint Institute of Nuclear Research in Dubna, USSR, (with a very high flux in the pulse) using powdered samples of Pb, Al, Si, Zn, ZnO. Orig. art. has: 12 figures, 5 formulas, and 2 tables.

ASSOCIATION: none

Card 2/3

L 11438-65

ACCESSION NR: AP4045663

SUBMITTED: 00

ENCL: 00

SUB CODE: SS, NP

NO REF SOV: 003

OTHER: 005

Card 3/3

SOSNOVSKAYA A.S.

Suppurative peritonitis according to clinical data for a nine year period (1951-1959). Med. zhur. Uzb. no.11:69 N '61. (MIRA 15:2)

1. Iz kliniki obshchey khirurgii sanitarnogo i pediatricheskogo fakul'tetov (zav. - prof. S.M.Geller) Tashkentskogo gosudarstvennogo meditsinskogo instituta.
(PERITONITIS)

SOSNOVSKAYA, A.S., assistant

Treatment and prevention of minor injuries in cotton pickers. Med.
zhur. Uzb. no12:38 D '61. (MIRA 15:2)

1. Iz kliniki obshchey khirurgii sanitarnogo i pediatricheskogo
fakul'tetov (zav. - prof. A.M.Geller) Tashkentskogo gosudarstvennogo
meditsinskogo instituta.
(AGRICULTURAL WORKERS--DISEASES AND HYGIENE)

S/169/62/000/001/002/083
D228/D302

AUTHORS: Grachev, Yu. N., Dekhnich, M. Ya., Litvinenko, I. B.,
Nekrasova, K. A. and Sosnovskaya, A. V.

TITLE: Deep geophysical investigations in the territory of
the Baltic Shield

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 1, 1962, 7, ab-
stract 1A50 (V sb. Geol.rezul'taty prikl. geokhimii
i geofiz, Razdel 2, M., Gosgeoltekhizdat, 1960, 43-
50)

TEXT: The results of deep geophysical sounding work in the USSR's
northern part are stated. The aim of the work was the detailed
study of the inner structure of the crust in the Ukhta-Kem' area.
The work was executed along a profile with a length of ~200 km by
the method of continuous set-ups: The seismographs were placed
every 100 m from each other within the general instrumental set-up
and during its movement along the traverse. Explosions were made
in three lakes which were situated at a distance of 50 - 80 km

Card 1/2

Deep geophysical investigations ...

S/169/62/000/001/002/083
D228/D302

from each other. Six branches of refracted seismic waves which are compared with six discontinuity surfaces of the inner crustal layers, were recorded. The boundaries -- at a depth of 10 - 15 and 34 - 38 km -- are most clearly and positively distinguished. The second boundary is the Mohorovicic surface. In the overlying layer the speed of the refracted seismic waves is 6.6 km/sec; in the underlying layer it is 8.1 km/sec. In the layer directly overlying the first boundary this velocity differs in different parts of the traverse and fluctuates within the limits of 5.4 - 6.3 km/sec. Other discontinuity surfaces and intermediate layers, characterized by speed values of 6.9 - 7.0 and 6.7 km/sec, are less clearly exposed. The layer boundaries lie almost horizontally, forming a small subterranean relief in separate parts of the profile. Geologic irregularities in the crust's upper parts were also successfully outlined in a horizontal direction along the working traverse, and a number of abyssal faults confined to the contact zones of different structural-facies geologic formations were successfully defined. [Abstractor's note: Complete translation.]

Card 2/2

S/169/62/000/007/005/149
D228/D307

AUTHORS: Grachev, Yu.N., Dekhnich, M.Ya., Detenyshev, V.G.,
Litvinenko, I.V., Nekrasova, K.A. and Sosnovskaya,
A.V.

TITLE: Deep regional geophysical investigations on the
Baltic Shield's territory

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 7, 1962, 7,
abstract 7A37. (V sb. Sostoyaniye i perspektivy
razvitiya geofiz. metodov poiskov i razvedki polezn.
iskopayemykh, M., Gostoptekhzdat, 1961, 45)

TEXT: See RZhGeofiz, 1962, 1A50. [Abstracter's note: ✓
Complete translation]

Card 1/1

GOVOR, V.M., inzh.; ISMAILOV, I.M., kand.tekhn.~~nauk~~; YARMUKHAMEDOV, U.Z., inzh.;
SOSNOVSKAYA, B.Ya., inzh.; KRIVORUCHKO, V.N., inzh.

Cooling of cottonseed oil cake prior to storage. Masl.-zhir.prom. 29 no.2:
40-41 F '63. (MIRA 16:4)

1. Upravleniye pishchevoy promyshlennosti Soveta narodnogo khozyaystva
Uzbekskoy SSR (for Govor). 2. Sredneaziatskiy filial Vsesoyuznogo
nauchno-issledovatel'skogo instituta zhirov (for Ismailov, Yarmukhamedov,
Sosnovskaya). 3. Yangiyul'skiy maslozhirovoy kombinat (for
Krivoruchko).

(Oil cake—Storage)

SOSNOVSKAYA, F.M.
TUMANYAN, M.A., SOSNOVSKAYA, F.M.

Absorption of dysentery endotoxins in radiation sickness in rabbit
[with summary in English]. Med.rad. 3 no.2:46-49 Mr-Ap'58 (MIRA 11:5)

1. Iz otdela meditsinskoy mikrobiologii (zav. -chlen-korrespondent
AMN SSSR V.L. Troitskiy) Instituta epidemiologii i mikrobiologii
imeni N.P. Gamalei AMN SSSR.

(ROENTGEN RAYS, inj.eff.

induction of radiation sickness in rabbits, eff. on
absorp. of dysentery endotoxins (Rus))

(SHIGELLA DYSENTERIAL

endotoxins, intestinal absorp. in rabbit, eff. of
x-ray-induced radiation sickness (Rus))

YATSIMIRSKAYA-KRONTOVSKAYA, M.K.; BOCHAROVA, T.V.; SOSNOVSKAYA, F.M.

Possibility of prolonged carriage of *Rickettsia prowazekii*. Report
No.2: Effect of ionizing radiations on the excretion of *Rickettsia*
prowazekii from the organism of animals after experimental typhus.
Zhur.mikrobiol.,epid.i immun. 30 no.11:84-86 N '59. (MIRA 13:3)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.
(TYPHUS exper.)
(RADIATION EFFECTS exper.)

GALITSKIY, Boris Mikhaylovich; SEMIBRATOV, Vsevolod Nikolayevich;
SMIRNOV, Boris Konstantinovich; RUSAKOV, A.N., retsenzent;
SURYGINA, E., red.; SOSNOVSKAYA, G., red.; LEUSHCHENKO, N.,
tekhn. red.; YEREMINA, I., tekhn. red.

[Regulations for the performance of repair and construction
work; norms and estimates] Pravila proizvodstva remontno-
stroitel'nykh rabot, normy i rastsenki. Izd.2., perer. i
dop. Kiev, Gos.izd-vo lit-ry po stroit. i arkhitekt. USSR,
1963. 732 p. (MIRA 16:12)
(Building--Repair and construction)

BULDEY, Vasil'y Romanovich, kand. tekhn. nauk; SOSNOVSKAYA, G.I., red.;
ZELENKOVA, Ye.Ye., tekhn. red.

[Porous concrete water intakes] Poristobetonnye vodozabory. Kiev,
Gos.izd-vo lit-ry po stroit. i arkhitekt. USSR, 1961. 60 p.
(MIRA 14;11)
(Hydraulic engineering--Equipment and supplies)

GOL'TSMAN, Isaak Iosifovich; NARIZHNYI, Viktor Artemovich; SOSNOV-
SKAYA, G., red.; NARINSKAYA, A., tekhn. red.

[Manufacture of wood-chip panels] Izgotovlenie drevesno-
struzhechnykh plit. Kiev, Gos. izd-vo lit-ry po stroit.i
arkhit. USSR, 1961. 88 p. (MIRA 14:5)
(Wood, Compressed)

GORSKIY, Vyacheslav Vyacheslavovich; SOSNOVSKAYA, G.I., red.;
LEUSHCHENKO, N.L., tekhn. red.

[Design of reinforced concrete structures subject to torsional
forces] Proektirovanie zhelezobetonnykh konstrukttsii, pod-
verzhennykh krucheniiu. Kiev, Gos.izd-vo lit-ry po stroit. i
arkhit. USSR, 1961. 139 p. (MIRA 15:4)
(Reinforced concrete construction)

KASPIN, Lev Abramovich; SMIRNOV, Boris Konstantinovich; GADASHEVICH, Anna Mikhaylovna; PERNYATIN, Aleksandr Zinov'yevich; BASHMINSKIY, S.V., retsenzent; GOBERMAN, M.D., spets. red.; SOSNOVSKAYA, G.I., red.; BEREZOVSKIY, N.I., tekhn. red.

[Industrial norms, wage rates, and specifications for construction and assembly work; general construction operations] Proizvodstvennye normy, rastsenki i pravila na stroitel'no-montazhnye raboty; obshchestroitel'nye raboty. Izd.5., dop. i ispr. Kiev, Gosstroizdat USSR, 1961. 1025 p. (MIRA 15:7)

(Building—Handbooks, manuals, etc.)

MIKOL'SKIY, Yuriy Nikolayevich; SOSNOVSKAYA, G.I., red.; LEUSHCHENKO,
N.L., tekhn. red.

[Pneumatic conveying in the production of building materials]
Pnevmaticheskii transport v proizvodstve stroitel'nykh ma-
terialov. Kiev, Gosstroizdat, USSR, 1962. 102 p.
(MIRA 15:10)

(Pneumatic conveying)
(Building materials—Transportation)

LUYK, Igor' Al'fredovich; SOSNOVSKAYA, G.I., red.; ZELENKOVA, Ye.Ye.,
tekhn. red.

[Basic principles of organizing the servicing and repair of
construction equipment] Osnovnye printsipy organizatsii obslu-
zhivaniia i remonta stroitel'nykh mashin. Kiev, Gosstroizdat,
USSR, 1962. 127 p. (MIRA 15:10)
(Construction equipment—Maintenance and repair)

KASPIN, Lev Abramovich; SMIRNOV, Boris Konstantinovich; GADASHEVICH, Anna Mikhaylovna; PERMYATIN, Aleksandr Zinov'yevich; BASHINSKIY, S.V., retsenzent; [deceased]; GOBERMAN, M.D., spets. red.; SOSNOVSKAYA, G.I., red.; BEREZOVSKIY, N.I., tekhn. red.

[Production norms, estimates, and regulations for construction and assembly operations; general construction operations] Proizvodstvennye normy rastsenki i pravila na stroitel'no-montazhnye raboty; obshchestroitel'nye raboty. Izd. 6., dop. i ispr. Kiev, Gosstroizdat USSR, 1962. 1025 p. (MIRA 15:10)
(Construction industry)

KOVALEV, Nikolay Petrovich; SOSNOVSKAYA, G.I., red.; LEUSHCHENKO,
N.L., tekhn. red.

[Field methods for testing soils in water] Polevye metody
ispytaniia gruntov v vodnoi srede. Kiev, Gosstroizdat,
USSR, 1963. 110 p. (MIRA 16:5).
(Soils—Testing)

YUDIN, Vasilii Kliment'yevich; SOSNOVSKAYA, G.I., red.; YEREMINA,
I.A., tekhn. red.

[Overground pipe laying] Nadzemnaia prokladka truboprovodov.
Kiev, Gosstroizdat USSR, 1963. 117 p. (MIRA 16:7)
(Pipelines—Design and construction)

SOSNOVSKAYA, I. G.

Chemical Abst.

Vol. 48 No. 4

Feb. 25, 1954

General and Physical Chemistry

②
The $\text{LiCl}-\text{BeCl}_2-\text{H}_2\text{O}$ system at 0° . A. V. Novoselova and I. G. Sosnovskaya. *J. Gen. Chem. U.S.S.R.* 21, 893-7 (1951) (Engl. translation); *Zhur. Obshchei Khim.* 21, 813-17 (1951).—The soly. isotherm of the system $\text{LiCl(I)}-\text{BeCl}_2\text{(II)}-\text{H}_2\text{O}$ was detd. at 0° . The soly. of I in H_2O is 41.32 wt. %; the solid phase being $\text{LiCl}\cdot 2\text{H}_2\text{O(III)}$. Stable univariant equil. occur at soln. compn. 17.2 I and 25.8% II with solids III and $\text{LiCl}\cdot \text{H}_2\text{O(IV)}$, and at soln. compn. 13.3 I and 29.4% II with solids IV and $\text{BeCl}_2\cdot 4\text{H}_2\text{O(V)}$. The equil. solid phase between these points is IV. The soly. of II is 40.35% the solid being V. A metastable univariant equil. was found with solids III and V. No double salts exist at 0° .
Bernard M. Zeffert

MF
7-13-54

ACCESSION NR: AP4034915

S/0181/64/006/005/1369/1374

AUTHORS: Nitts, V. V.; Papulova, Z. G.; Sosnovskaya, I.; Sosnovskiy, Ya.

TITLE: Structure investigation by neutron diffraction on a fast pulse reactor

SOURCE: Fizika tverdogo tela, v. 6, no. 5, 1964, 1369-1374

TOPIC TAGS: neutron diffraction, crystal structure, fast pulse reactor, oxygen parameter, reactor IBR

ABSTRACT: The authors investigated the applicability of a fast pulse reactor IBR, as used at the Laboratoriya neytronnoy fiziki Ob'yedinennogo instituta yadernykh issledovaniy (Laboratory of Neutron Physics of the United Institute of Nuclear Studies) for structural studies of crystals. The average power of the instrument is 1 kv, and a beam of incident white light is employed. The energy spectrum of neutrons scattered at the incident angle was measured according to transit time. The technique gave high intensity and low background. Neutron diffraction spectra were obtained for powdered samples of Al, Zn, and ZnO. The results show that great precision may be obtained for structural analysis. By this method it was found that the oxygen parameter of ZnO is 0.374 (a refinement of the value previously

Cord 1/2

ACCESSION NR: AP4034915

taken, 0.375, the average of 0.360 and 0.390). In comparison with the standard powder method using a water-cooled, water-moderated reactor of 2000 kv, the fast pulse reactor shows considerable gain in time of measurement (because of the high intensity and low background). "The authors thank F. L. Shapiro for proposing the topic and for his useful discussions. They also thank B. Buras for scientific consultation and S. Nabyants and V. V. Golikov for their aid in the work." Orig. art. has: 6 figures and 1 table.

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy, Dubna (United Institute of Nuclear Research)

SUBMITTED: 18Nov63

ENCL: 00

SUB CODE: NP, OP

NO REF SOV: 002

OTHER: 004

Card 2/2

LATSINIK, Ye.Ya., prof.; NOTKIN, D.L., kand.med.nauk; SLOVESNIK, R.S.;
SOSNOVSKAYA, L.A.; BACHINSKIY, D.Kh.; SOTTICHENKO, L.A.;
KAMINSKAYA, L.I. (Odessa)

Characteristics of the clinical course of Asian flu (A²) in the
1959 epidemic. Klin.med. 38 no.3:59-63 Mr'60. (MIRA 16:7)

1. Iz Odesskoy gorodskoy infektsionnoy bol'nitsy Leninskogo
rayona (glavnyy vrach L.T.Zhidovlenko).

24(7)

SOV/48-23-9-12/57

AUTHORS: Rusanov, A. K., Sosnovskaya, L. I.

TITLE: The Rules of the Influence of "Third" Elements in the Spark Analysis of Solutions

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 9, pp 1079-1081 (USSR)

ABSTRACT: This article is the abridged rendering of a treatise published in the periodical Analiticheskaya Khimiya. The dependence of spectral line intensity on the properties of the solutions and the reciprocal influence brought to bear on elements is investigated. The solution was introduced into the discharge zone by means of rotating metal- or graphite disks, in which case, whenever graphite disks were used, the spark discharge took place between the two films of the solution, the thickness of which amounted to between 0.003 and 0.06 mm. In other experiments, graphite capillary electrodes were used by the aid of which the solution was conveyed into the discharge zone. In these experiments the IG-2 spark generator constructed according to the wiring scheme of Rayskiy was used. Line intensity was found to decrease with increasing film thickness. If, however, the film is not perforated by the spark, line intensity does not decrease even in the case of greater thicknesses.

Card 1/2

SOV/48-23-9-12/57

The Rules of the Influence of "Third" Elements in the Spark Analysis of Solutions

When evaluating the concentration of elements according to the absolute values of spectral-line intensity, the electric conductivity of the solution, the thickness of the layer of liquid, and its restoration rate must be taken into account. The influence exercised by "third" elements upon the absolute and relative spectral-line intensities depends on the ionization potential and the concentration of atoms of the influencing elements. Thus, these "third" elements exercise a minimum influence in the case of discharges between non-perforated surfaces of solutions. In the case of spark discharges between two thick films of the solution, line intensity practically does not depend on the ionization potential and on the atom concentration of the "third" elements; line intensity increases rapidly if their ionization potential decreases and if their concentration increases. There are 2 figures.

Card 2/2

SOSNOVSKAYA, L. I., CAND TECH SCI, "ON THE ^{effect} ~~influence~~ OF
FOREIGN ELEMENTS IN A SPARK SPECTRAL ANALYSIS OF SOLUTIONS."
Moscow, 1960. (MIN OF GEOLOGY AND MINERAL CONSERVATION USSR.
ALL-UNION SCI RES INST OF RAW MINERALS "VIMS"). (KL, 2-61,
212).

-181-

BORISENKO, L.F.; SOSNOVSKAYA, L.I.

Zirconium and hafnium content in thortveitite. Izv. AN SSSR. Ser.-
geol. 26 no.8:101-103 Ag '61. (MIRA 14:9)

1. Institut mineralogii, geokhimii i kristallokhimii redkikh elemen-
tov AN SSSR, Moskva.
(Zirconium) (Hafnium) (Thortveitite)

BORISENKO, L.F.; ZHURAVLEV, L.G.; SOSNOVSKAYA, L.I.

Reciprocal relation between the average concentration of scandium and some rock-forming elements in intrusive rocks. Dokl. AN SSSR 138 no.1:203-206 My-Je '61. (MIRA 14:4)

1. Institut mineralogii, geokhimii i kristalloghimii redkikh elementov Akademii nauk SSSR. Predstavleno akademikom D.I. Shcherbakovym.

(Rocks, Igneous--Analysis) (Scandium)

ACCESSION NR: AT4042140

S/2677/63/000/018/0186/0189

AUTHOR: Sosnovskaya, L. I.

TITLE: Spectral determination of impurities in galenites

SOURCE: AN SSSR. Institut mineralogii, geokhimii i kristalloghimii redkikh elementov. Trudy*, no. 18, 1963. Eksperimental'no-metodicheskiye issledovaniya v oblasti mineralogii i geokhimii redkikh elementov (Experimental-methodical studies in the field of mineralogy and geochemistry of rare elements), 186-189

TOPIC TAGS: galena, galenite, lead sulfide, quantitative analysis, geochemistry, galenite analysis, spectroscopy, spectral analysis, galenite impurity

ABSTRACT: The author describes the standard procedure for the determination of silver, bismuth, antimony, cadmium, thallium, and indium in galenites used at her Institute. The high silver content (0.01-1%) and very low thallium and indium content (0.0001-0.001%) require three separate procedures for silver (1), bismuth, antimony and cadmium (2), and thallium with indium (3), using a 1:10 dilution of galenite samples with pure lead sulfide for (1) and different sample weights and electrode sizes for each particular group. The spectra are photographed with an ISP-28 intermediate-dispersion three-lens-capacitor quartz spectrograph using a d.c. arc as the source of excitation. The method is rapid, sufficiently accurate

Card 1/2

ACCESSION NR: AT4042140

and requires only small amounts of material. "The author expresses gratitude to K. F. Kaznetsov, S. I. Lebedeva and N. N. Popova for providing the material, and to N. V. Lizunov for valuable advice and directions." Orig. art. has: 1 figure and 4 tables.

ASSOCIATION: Institut mineralogii, geokhimii i kristalloghimii redkikh elementov AN SSSR (Institute of the Mineralogy, Geochemistry and Crystallochemistry of the Rare Elements, AN SSSR)

SUBMITTED: 00

ENCL: 00.

SUB CODE: IC, ES

NO REF SOV: 000

OTHER: 000

Card 2/2

KHALEKOVA, Ye.B.; SOSNOVSKAYA, L.I.

ZrO₂/HfO₂ ratio in zircons from the alkali complex in the Vishnevyye and Il'men Mountains. Geokhimiia no.1:68-78 Ja '63. (MIRA 16:9)

1. Institute of Mineralogy, Geochemistry and Crystal Chemistry of Rare Elements, Academy of Sciences, U.S.S.R., Moscow.
(Vishnevyye Mountains--Zircon) (Il'men Mountains--Zircon)
(Mineralogical chemistry)

SOSNOVSKAYA, L.S., inzhener.

Some unavoidable problems of standardization. Vest.mash. 33 no.4:80-82 Ap
'53. (MLRA 6:5)

(Standardization)

MEL'NIKOV, S.A.; GORBACHEVA, F.Ye.; SOSNOVSKAYA, L.S.

Some developmental characteristics of myopathies in children.
Zhur. nevr. i psikh. 61 no.7:1024-1029 '61. (MIRA 15:6)

1. Detskoye otdeleniye kliniki nervnykh bolezney (zav.
kafedroy - prof. V.V. Mikheyev) I Moskovskogo ordena Lenina
meditsinskogo instituta imeni Sechenova.

(MUSCLES--DISEASES)
(MUSCULAR DYSTROPHY)

5 (2)

AUTHORS:

Yudelevich, I. G., Shelpakova, I. R., SOV/32-25-8-21/44
Sosnovskaya, T. I., Bortnik, L. S.

TITLE:

Spectrographic Control of the Production Process of Rare Metals

PERIODICAL:

Zavodskaya laboratoriya, 1959, Vol 25, Nr 8, pp 959 - 961
(USSR)

ABSTRACT:

To control the extraction of rare elements from semi-finished products and wastes of the lead-zinc production, a spectrographic determination method has been developed for In, Tl, and Te in the semi-finished products, and for the determination of the impurities in metallic Tl, Te, and Se. The determinable concentrations are for powder 0.001 - 20% and for solutions 8 - 300 mg/l. For lower concentrations (0.001 - 0.5%) an arc PS-39 is used, at higher concentrations (0.5 - 20%) a spark IG-2. A "fulgurator" is used for the analysis of solutions (Ref 1). The article contains a description of the working conditions with the arc and with the spark. The simultaneous determination of In and Tl in lead dust and lead products was partly effected according to the method reference 2. The article contains the conditions of analysis for the final deter-

Card 1/2

Spectrographic Control of the Production Process of Rare Metals SOV/32-25-8-21/44

mination (Table). N. T. Alontseva developed the method for the determination of Na and other impurities. It was effected according to reference 4 with a for Na relative accuracy of $\pm 10\%$. The determination method for Se and Te was developed in collaboration with V. N. Vardugina and occurred under conditions differing from the above. A method for the determination of Fe, Te, and As in Se was also developed at which an arc PS-39 was used. There are 1 table and 4 Soviet references.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy gorno-metallurgicheskiy institut tsvetnykh metallov (All-Union Scientific Mining-metalurgical Research Institute of Non-ferrous Metals)

Card 2/2

S/137/62/000/004/029/201
A006/A101

AUTHORS: Yudelevich, I. G., Shokarev, M. M., Sosnovskaya, T. I., Stanevich, V. V., Alontseva, N. T.

TITLE: Spectrographic control of tellurium production

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1962, 28, abstract 4G178
(V sb. "Nekotoryye vopr. emission. i molekulyarn. spektroskopii", Krasnoyarsk, 1960, 126-133)

TEXT: Detailed information is presented on methods of determining Te in semi-products of Pb-manufacture and admixtures in commercial Te. For products containing 0.01 - 0.05% Te, the arc method of exciting the spectra is recommended with admixture of 7% Bi(NO₃)₃. To determine high Te contents (up to 10%) spark excitation of spectra is used on a mixture of samples with Cu powder in a 1 : 3 ratio, after briquetting under a pressure of 3,000 kg/cm². To determine admixtures in Te, it is evaporated without a buffer from a carbon electrode crater of 5 mm depth and 4 mm in diameter. Graduation graphs are given. There are 5 references.

A. Tseydler

[Abstracter's note: Complete translation]

Card 1/1

S/137/62/000/004/197/201
A154/A101

AUTHORS: Yudelevich, I. O., Shelpakova, I. R., Polatbekov, F. A., Sosnovskaya, T. I.

TITLE: Spectrographic determination of arsenic in semiproducts of rare metal metallurgy

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1962, 11 - 12, abstract 4K70 ("Metallurg. i khim. prom-st' Kazakhstana. Nauchno-tekhn. sb.", 1961, no. 3 (13), 77 - 81)

TEXT: Spectrographic methods of determining As in powdered test samples and technological solutions are proposed. Small and medium contents of As (0.02 - 8%) in powders are determined simultaneously with Te by the arc method of exciting the spectrum; the test sample is introduced into the discharge out of a carbon electrode's crater. Charcoal powder containing comparison element Bi (5%) is used as a spectrographic buffer. Mean relative reproducibility error = 5 - 6%. Determination of high concentrations of As (5 - 15%) in In products is carried out by the spark method of spectrum excitation. Test sample is briquetted to-

Card 1/2

Spectrographic determination of...

S/137/62/000/004/197/201
A154/A101

gether with copper powder. Analytical pair of lines used for analyzing technological solutions is As 2,349.84 Å - Cr 2,408.62 Å. Cr is introduced in the form of $K_2Cr_2O_7$ aqueous solution. Bi can be used as the internal standard. Spectra of weak alkaline and sulfide solutions are excited in the arc of a 3 - 4 amp, alternating current. Electric current used in the analyses of strong alkaline solutions with a low concentration of As must be 9 - 10 amp. Changes in the content of Pb, Sb, Sn and Zn have no effect on the results of determining As. Average relative error in the analyses of solutions containing As in an amount of 0.5 - 40 g/l is $\pm 5 - 8\%$.

L. Vorob'yeva

[Abstracter's note: Complete translation]

Card 2/2

YUDELEVICH, I.G.; SHELPAKOVA, I.R.; Primali uchastiye: SOSNOVSKAYA, T.I.;
AVSEYKO, Ye.M.; KHAMIDULINA, F.K.

Spectrographic determination of indium, thallium, and tellurium
in solutions during their recovery from by-products of the lead-
zinc industry. Zhur.anal.khim. 17 no.2:174-179 Mr-Ap '62.
(MIRA 15:4)

1. All-Union Scientific Research Institute of Non-Ferrous Metals,
Ust-Kamenogorsk.
(Indium--Spectra) (Thallium--Spectra) (Tellurium--Spectra)

L 34882-66 EWT(m)/EWP(t)/ETI IJP(c) RDW/JD/GD

ACC NR: AT6013544 (A) SOURCE CODE: UR/0000/65/000/000/0111/0114

AUTHOR: Yudelevich, I. G.; Shelpakova, I. R.; Avseyko, Ye. M.; Minskaya, L. N.;
Larina, L. K.; Chalkova, N. Ya.; Sosnovskaya, T. I.; Zaks, I. V.; Khamidulina, F. K.

ORG: None

TITLE: Spectrographic determination of trace elements in the raw materials and intermediate products of the rare metals industry

SOURCE: Ural'skoye soveshchaniye po spektroskopii, 4th, Sverdlovsk, 1963. Materialy. Moscow, Izd-vo Metallurgiya, 1965, 111-114

TOPIC TAGS: spectrum determination, zinc, lead, indium, thallium, germanium, selenium, tellurium, spectrographic analysis

ABSTRACT: A number of new methods are described for determination of indium, thallium, germanium, selenium and tellurium in intermediate products of the lead and zinc industry. Germanium is spectrographically determined by injection of powder specimens into an a-c arc discharge. The spectroscopic buffer for determination of more than 0.001% Ge is carbon powder containing 5% Bi(NO₃)₃ as an internal standard. The analytical line pair is Ge 269.13 mμ-Bi 280.96 mμ. For determining higher concentrations of germanium (above 0.1%), use is made of the Ge 258.91 mμ-Bi 280.96 mμ or Ge 274.04 mμ-Bi 280.96 mμ line. A buffer consisting of a mixture of quartz and sulfur

Card 1/2

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was used for determining traces of germanium of the order of 1 part in 100,000 in slags and mattes. The sensitivity of germanium determination with respect to the Ge 303.90 mμ line is 10-4% in this case with a relative error of about 15%. Commercial solutions are analyzed by electrode saturation. The relative mean square error is 9% with this method. Indium, thallium, gallium, and germanium are simultaneously determined by pouring the solutions to be analyzed into a socket in a special copper electrode and then drying the electrode so that the solution adheres to the surface. The advantage of this method over the saturation of carbon electrodes lies in the possibility of using the sensitive long-wave lines located in the region of cyanogen bands: In 410.18 mμ, Ga 417.2 mμ and Tl 377.57 mμ. This method gives a relative error of 9%. Methods are discussed for determination of rare elements in zinc and lead ores with a sensitivity of at least 10-4% using spectrographic analysis with a buffer solution of sodium fluoride. Orig. art. has: 1 figure.

SUB CODE://,20/ SUBM DATE: 06Jul65/ ORIG REF: 005/ OTH REF: 000

Card 2/2

YUDELEVICH, I.G.; VERSHININA, F.I.; SOSNOVSKAYA, T.I.

Spectrographic determination of arsenic, antimony, and tin
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1. Institut fizicheskoy khimii imeni L.V. Pisarzhevskogo AN
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SOCHOVAYA, Ye. A.

"A Study of the Microflora of Sheep Rumen in Connection With Various Feeding Schedules." Cand Biol Sci, Moscow Agricultural Acad imeni K. A. Timiryazev, Moscow, 1953. (RZhBiol, No 7, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)

SO: Sum. No. 556, 24 Jun 55

SOSNOVSKAYA, Ye.A., kand.biolog.nauk, starshiy prepodovatel'

Rumen microflora of sheep kept on different food rations.
Zhivotnovodstvo 21 no.7:61-63 Je '59. (MIRA 12:9)

1. Orenburgskiy sel'skokhozyaystvennyy institut.
(Stomach--Bacteriology) (Sheep--Feeding and feeds)

PETROVA, M.V.; SOSNOVSKAYA, Ye.Yu.; AKHMEDOV, K.S.

Interaction between the K-4 polyelectrolyte and Keles bentonite
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USSR/Medicine - Physiology

FD-2467

Card 1/2 Pub 33-18/24

Author : Sosnovskaya, Z. A.

Title : Effect of anode and cathode stimulation of the brain on spinal reflexes and Sechenov inhibition

Periodical : Fiziol. zhur. 2, 279-284, Mar-Apr 1955

Abstract : Cathode stimulation (200-300 microampere) of the midbrain in frogs (with the indifferent electrode placed on the abdomen) lengthens the latent period of spinal reflexes (skin-acid reflex), and this effect is maintained for several minutes after interruption of the stimulation. Anode stimulation of the same strength shortens somewhat to latent periods, but not in all experiments, while stronger anode stimulation (400-500 microamp.) lengthens the latent period, similar to the effect of cathode stimulation, but less pronounced. Direct cathode stimulation of the spinal cord (250-350 microampere) lengthens the latent period slightly while anode stimulation produces

Card 2/2

FD-2467

either no effect or a slight shortening. Anode stimulation of the spinal chord weakens the Sechenov inhibition of spinal reflexes, produced by placing a NaCl crystal on the midbrain. Six references, all USSR (3 since 1940).

Institution: Laboratory of General Nerve-Muscle Physiology of the Institute of Physiology imeni I. P. Pavlov of the Academy of Sciences USSR, Leningrad

Submitted : April 18, 1952

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VASIL'YEV, L.L.; SOSNOVSKAYA, Z.A.

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17-00000-17999 E. A.
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1. Laboratoriya obshchey nervno-myshechnoy fiziologii (zav.-
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